

What is Claimed:

1. A system in connection with a power facility having at least one power element, the system for monitoring and/or controlling at least a portion of the power facility and comprising:
 - a field drop coupled to each element, the field drop for monitoring the element, reporting status data corresponding to the element, receiving control information for controlling the element, and in fact controlling such element based on such control information;
 - a local area network (LAN) coupling each field drop to a hub;
 - a data server operatively coupled to the hub of the LAN, the data server for receiving the status data from each field drop and taking any appropriate action necessary in response thereto, the data server also allowing a user to access any particular field drop of the system to read data for the corresponding element, and to issue control commands for the element to be carried out by the corresponding field drop.
2. The system of claim 1 wherein each field drop is an Intelligent Electronic Device (IED).
3. The system of claim 2 wherein each IED is a generic device deployable to any of several elements at the power facility.
4. The system of claim 3 wherein each IED includes configuration information identifying a configuration of the IED, and wherein the data server queries such IED for such configuration information and stores same for later use.
5. The system of claim 1 wherein the data server is local to the LAN at the power facility.
6. The system of claim 1 wherein the data server is remote from the LAN at the power facility and coupled thereto by way of a communications network.
7. The system of claim 1 wherein the data server and each field drop communicate with each other by way of a TCP/IP communications protocol.

8. The system of claim 1 in connection with a plurality of power facilities each having at least one power element, the system for monitoring and/or controlling at least a portion of each power facility and comprising:

a field drop coupled to each element at each facility, the field drop for monitoring the element, reporting status data corresponding to the element, receiving control information for controlling the element, and in fact controlling such element based on such control information;

a local area network (LAN) at each facility, the LAN coupling each field drop at the facility to a hub;

a data server operatively coupled to the hub of each LAN, the data server for receiving the status data from each field drop and taking any appropriate action necessary in response thereto, the data server also allowing a user to access any particular field drop of the system to read data for the corresponding element, and to issue control commands for the element to be carried out by the corresponding field drop.

9. The system of claim 8 wherein the data server is configured to know locally how to connect to each LAN, whereby a user requesting to get data from or give a command to a particular element at a particular facility need not be concerned with establishing the actual connection or deciding on a communications protocol.

10. The system of claim 1 wherein the data server receives each command from the user as an HTTP request and forwards same to an appropriate field drop.

11. The system of claim 1 wherein each field drop reports status data and other data to the data server as an HTML / XML page.

12. The system of claim 1 wherein each field drop includes configuration information identifying a configuration of the field drop, and wherein the data server queries such field drop for such configuration information and stores same for later use.

13. The system of claim 1 wherein each field drop is substantially continuously connected to the data server by way of the LAN.

14. The system of claim 1 wherein the data server stores data as received from each field drop for retrieval by the user.

15. The system of claim 1 wherein the LAN is a wireless LAN, and wherein each of each field drop and the hub of the LAN includes a wireless transceiver for communicating within the wireless LAN.

16. The system of claim 15 wherein the wireless LAN is implemented in a gigahertz frequency range.

17. A method in connection with a system in connection with a power facility having at least one power element, the system for monitoring and/or controlling at least a portion of the power facility and comprising a field drop coupled to each element and a data server operatively coupled to the hub of the LAN, the method for reporting a monitored event requiring timely attention, the method comprising:

executing an application at a field drop to monitor a value as obtained by such field drop;

the application detecting a triggering event when the monitored value exceeds a predetermined threshold;

the application generating a request containing event information pertaining to the triggering event;

the field drop of the application sending the generated request to the data server;

the data server receiving the sent request; and

the data server based on the sent request taking a programmed action.

18. The method of claim 17 comprising the application generating an HTTP request containing the event information.

19. The method of claim 18 comprising the application generating the HTTP request including an event-handling application for the data server to execute and the event information formatted according to a format amenable to the event-handling application.

20. The method of claim 19 further comprising the data server executing the event-handling application and passing the formatted event information thereto.

21. The method of claim 17 comprising the data server based on the sent request taking a programmed action comprising a member selected from a group consisting of notifying a user of the event, and determining a course of action for a field drop to take and commanding such field drop to in fact take such course of action.

22. A method in connection with a system in connection with a power facility having at least one power element, the system for monitoring and/or controlling at least a portion of the power facility and comprising a field drop coupled to each element and a data server operatively coupled to the hub of the LAN, each field drop being locally programmed with configuration information relevant to the element thereof, the method for a field drop to report the configuration information thereof to the data server and comprising:

the field drop sending a configuration request to the data server;

the data server receiving the configuration request and in response sending a request to the requesting field drop for the configuration information thereof;

the field drop sending the requested configuration information to the data server;

and

the data server receiving the sent configuration information and storing same.

23. The method of claim 22 comprising the field drop sending an HTTP configuration request to the data server.

24. The method of claim 22 comprising the field drop sending the requested configuration information to the data server as part of an HTTP request.

25. The method of claim 22 comprising the field drop sending the requested configuration information to the data server as a preformatted web page.